- (2) Interpreting the occupant characteristics and location information to determine whether or not the air bag should deploy; and
- (3) Activating or suppressing the air bag system based on the interpretation of characteristics and occupant location information.
- (b) Automatic suppression zone (ASZ) means a three-dimensional zone adjacent to the air bag cover, specified by the vehicle manufacturer, where air bag deployment will be suppressed by the DASS if a vehicle occupant enters the zone under specified conditions.
- (c) Standard No. 208 means 49 CFR 571.208.

§552.13 Form of petition.

Each petition filed under this subpart shall—

- (a) Be submitted to: Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, DC 20590.
- (b) Be written in the English language.
- (c) State the name and address of the petitioner.
- (d) Set forth in full the data, views and arguments of the petitioner supporting the requested test procedure, including all of the content information specified by §552.14. Any documents incorporated by reference in the procedure shall be submitted with the petition.
- (e) Specify and segregate any part of the information and data submitted that the petitioner wishes to have withheld from public disclosure in accordance with Part 512 of this chapter including, if requested, the name and address of the petitioner.
- (f) Not request confidential treatment for the requested test procedure and, to the extent confidential treatment is requested concerning a particular DASS or data and analysis submitted in support of the petition, provide a general non-confidential description of the operation of the DASS and of the data and analysis supporting the petition.
- (g) Set forth a requested effective date and be submitted at least nine months before that date.

§ 552.14 Content of petition.

The petitioner shall provide the following information:

- (a) A set of proposed test procedures for S28.1, S28.2, S28.3, and S28.4 of Standard No. 208 which the petitioner believes are appropriate for assessing a particular DASS.
- (1) For S28.1 of Standard No. 208, the petitioner shall specify at least one specific position for the Part 572, subpart O 5th percentile female dummy that is:
- (i) Outside but adjacent to the ASZ,
- (ii) Representative of an unbelted occupant position that is likely to occur during a frontal crash.
- (2) For S28.2 of Standard No. 208, the petitioner shall specify at least one specific position for the Part 572 Subpart P 3-year-old child dummy and at least one specific position for the Part 572 Subpart N 6-year-old child dummy that are:
- (i) Outside but adjacent to the ASZ, and
- (ii) Representative of unbelted occupant positions that are likely to occur during a frontal crash where pre-crash braking occurs.
- (3) For S28.3 of Standard No. 208, the petitioner shall specify a procedure which tests the operation of the DASS by moving a test device toward the driver air bag in a manner that simulates the motion of an unbelted occupant during pre-crash braking or other pre-crash maneuver. The petitioner shall include a complete description, including drawings and instrumentation, of the test device employed in the proposed test. The petitioner shall include in the procedure a means for determining whether the driver air bag was suppressed before any portion of the specified test device entered the ASZ during the test. The procedure shall also include a means of determining when the specified test device occupies the ASZ.
- (4) For S28.4 of Standard No. 208, the petitioner shall specify a procedure which tests the operation of the DASS by moving a test device toward the passenger air bag in a manner that simulates the motion of an unbelted occupant during pre-crash braking or

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other pre-crash maneuver. The petitioner shall include a complete description, including drawings and instrumentation, of the test device employed in the proposed test. The petitioner shall include in the procedure a means for determining whether the passenger air bag was suppressed before any portion of the specified test device entered the ASZ during the test. The procedure shall also include a means of determining when the specified test device occupies the ASZ.

- (b) A complete description and explanation of the particular DASS that the petitioner believes will be appropriately assessed by the recommended test procedures. This shall include:
- (1) A description of the logic used by the DASS in determining whether to suppress the air bag or allow it to deploy. Such description shall include flow charts or similar materials outlining the operation of the system logic, the system reaction time, the time duration used to evaluate whether the air bag should be suppressed or deployed, changes, if any, in system performance based on the size of an occupant and vehicle speed, and a description of the size and shape of the zone where under similar circumstances and conditions the DASS may either allow or suppress deployment. Such description shall also address whether and how the DASS discriminates between an occupant's torso or head entering the ASZ as compared to an occupant's hand or arm, and whether and how the DASS discriminates between an occupant entering the ASZ and an inanimate object such as a newspaper or ball entering the ASZ.
- (2) Detailed specifications for the size and shape of the ASZ, including whether the suppression zone is designed to change size or shape depending on the vehicle speed, occupant size, or other factors.
- (c) Analysis and data supporting the appropriateness, repeatability, reproducibility and practicability of each of the proposed test procedures.
- (1) For the procedures proposed for inclusion in S28.1 and S28.2 of Standard No. 208, the petitioner shall provide the basis for the proposed dummy positions, including but not limited to, why the positions are representative of

- what is likely to occur in real world crashes.
- (2) For the procedures proposed for inclusion in S28.3 and S28.4 of Standard No. 208, the petitioner shall provide:
- (i) A complete explanation of the means used in the proposed test to ascertain whether the air bag is suppressed or activated during the test.
- (ii) A complete description of the means used to evaluate the ability of the DASS to detect and respond to an occupant moving toward an air bag, including the method used to move a test device toward an air bag at speeds representative of occupant movement during pre-crash braking or other precrash maneuver.
- (iii) The procedure used for locating the test device inside a test vehicle in preparation for testing, including an accounting of the reference points used to specify such location.
- (iv) An explanation of the methods used to measure the amount of time needed by a suppression system to suppress an air bag once a suppression triggering event occurs.
- (v) High speed film or video of at least two tests of the DASS using the proposed test procedure.
- (vi) Data generated from not less than two tests of the DASS using the proposed test procedure, including an account of the data streams monitored during testing and complete samples of these data streams from not less than two tests performed under the proposed procedure.
- (d) Analysis concerning the variety of potential DASS designs for which the requested test procedure is appropriate; e.g., whether the test procedures are appropriate only for the specific DASS design contemplated by the petitioner, for all DASS designs incorporating the same technologies, or for all DASS designs.

§552.15 Processing of petition.

(a) NHTSA will process any petition that contains the information specified by this subpart. If a petition fails to provide any of the information, NHTSA will not process the petition but will advise the petitioner of the information that shall be provided if the agency is to process the petition. The agency will seek to notify the petitioner of